

DECLARATION AND POWER OF ATTORNEY

I, JAMES M. SCHULTZ, declare that I am a citizen of the United States of America, residing at Chillicothe, Illinois, and that I believe I am one of the original, first, and joint inventors together with WILLIAM C. BOLEY, JASON L. NIETHAMMER AND BRADY L. WINKLEMAN of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PRE-CHAMBERED TYPE SPARK PLUG WITH A FLAT BOTTOM BEING ALIGNED WITH A
BOTTOM SURFACE OF A CYLINDER HEAD

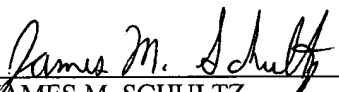
the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Larry G. Cain, Patent Office Reg. No. 31,150, telephone (309) 675-4922, J. Wesley Blumenshine, Patent Office Reg. No. 32,399, telephone (309) 675-5537, J. W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, and Dennis C. Skarvan, Patent Office Reg. No. 35,360, telephone (309) 675-6060, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Larry G. Cain, Caterpillar Inc.; Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 6-23-03
JAMES M. SCHULTZ Date

Post Office Address:

14927 N. Ivy Lake Road
Chillicothe, Illinois 61523-9132

DECLARATION AND POWER OF ATTORNEY

I, BRADY L. WINKLEMAN, declare that I am a citizen of the United States of America, residing at Lafayette, Indiana, and that I believe I am one of the original, first, and joint inventors together with WILLIAM C. BOLEY, JASON L. NIETHAMMER AND JAMES M. SCHULTZ of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PRE-CHAMBERED TYPE SPARK PLUG WITH A FLAT BOTTOM BEING ALIGNED WITH A BOTTOM SURFACE OF A CYLINDER HEAD

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Larry G. Cain, Patent Office Reg. No. 31,150, telephone (309) 675-4922, J. Wesley Blumenshine, Patent Office Reg. No. 32,399, telephone (309) 675-5537, J. W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, and Dennis C. Skarvan, Patent Office Reg. No. 35,360, telephone (309) 675-6060, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Larry G. Cain, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 25 June 2003

BRADY L. WINKLEMAN

Date

Post Office Address:

3987 W. 660 S

Lafayette, Indiana 47909-9249

DECLARATION AND POWER OF ATTORNEY

I, JASON L. NIETHAMMER, declare that I am a citizen of the United States of America, residing at Lafayette, Indiana, and that I believe I am one of the original, first, and joint inventors together with WILLIAM C. BOLEY, JAMES M. SCHULTZ AND BRADY L. WINKLEMAN of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**PRE-CHAMBERED TYPE SPARK PLUG WITH A FLAT BOTTOM BEING ALIGNED WITH A
BOTTOM SURFACE OF A CYLINDER HEAD**

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Larry G. Cain, Patent Office Reg. No. 31,150, telephone (309) 675-4922, J. Wesley Blumenshine, Patent Office Reg. No. 32,399, telephone (309) 675-5537, J. W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, and Dennis C. Skarvan, Patent Office Reg. No. 35,360, telephone (309) 675-6060, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Larry G. Cain, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 6/25/03
JASON L. NIETHAMMER Date

Post Office Address:

2106 Canyon Creek Drive
Lafayette, Indiana 47909-8044

DECLARATION AND POWER OF ATTORNEY

I, WILLIAM C. BOLEY, declare that I am a citizen of the United States of America, residing at Lafayette, Indiana, and that I believe I am one of the original, first, and joint inventors together with JASON L. NIETHAMMER, JAMES M. SCHULTZ AND BRADY L. WINKLEMAN of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**PRE-CHAMBERED TYPE SPARK PLUG WITH A FLAT BOTTOM BEING ALIGNED WITH A
BOTTOM SURFACE OF A CYLINDER HEAD**


the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Larry G. Cain, Patent Office Reg. No. 31,150, telephone (309) 675-4922, J. Wesley Blumenshine, Patent Office Reg. No. 32,399, telephone (309) 675-5537, J. W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, and Dennis C. Skarvan, Patent Office Reg. No. 35,360, telephone (309) 675-6060, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Larry G. Cain, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 25 JUN 03

WILLIAM C. BOLEY Date

Post Office Address:
5635 Roseberry Ridge
Lafayette, Indiana 47905-8507